



CWD Surveillance Ongoing

By Greg Freeman

While chronic wasting disease has not been discovered in free-ranging or farmed cervid populations in the state, wildlife managers are concerned that eventually this fatal disease could make its way to North Dakota's deer or elk herds.

How could it not be of concern, since CWD continues to be documented in free-ranging deer in neighboring South Dakota and Saskatchewan, and has shown up in farmed deer herds in Minnesota and Montana?

"CWD has been found to the north, south, east and west of us," said Randy Kreil, North Dakota Game and Fish Department wildlife division chief. "So yes, it is a concern, and if it does happen, we just need to make sure we catch it early, act appropriately, and keep the public fully informed."

The Game and Fish Department has been monitoring for CWD for several years. Dorothy Fecske, Department wildlife disease biologist, said the objective is to determine the presence or absence of CWD within the state, and to monitor any change in presence, distribution and prevalence of CWD.

"Basically our overall goal is to develop standards for adequate surveillance in free-ranging cervids in North Dakota," she said.

Surveillance efforts focus on targeted animals and those harvested by hunters. This includes sampling and testing hunter-harvested deer and elk from specified surveillance units, and continuous sampling and testing of animals showing signs and symptoms consistent with the disease, Fecske said.

The Department's Targeted Surveillance program is conducted statewide and year-round, and is used for early detection of initial infection. Targeted animals include those that died of unknown causes, free-ranging deer and elk that show signs consistent with CWD – excessive drooling, emaciation, lack of coordination – and free-ranging cervids removed from farmed facilities.

The Hunter-Harvested Surveillance program is used to estimate prevalence over time and space. CWD surveillance units were identified for deer and elk, Fecske said, based on habitat, animal movements and densities, and hunting units.

The state is divided into eight surveillance units for deer, and each are sampled on a rotation basis. The objective is to collect a statistically valid sample – about 460 deer heads – in each surveillance unit per rotation. For elk, the goal is to collect about 60 heads from two surveillance units.

The brain stem and lymph nodes are removed from North Dakota deer and sent to a laboratory out-of-state to be tested for chronic wasting disease.

CWD Facts:

- Chronic wasting disease is a fatal disease of the central nervous system in deer and elk.
- It is in a family of diseases called transmissible spongiform encephalopathies.
- CWD is caused by a protein called a prion. When the prion replicates itself it causes damage to the brain and spinal cord. The cells that contain the prions rupture and cause sponge-like lesions in the brain.
- The means of passing the disease from one animal to another is unknown. It is believed the disease passes from animal to animal by contact with body fluids.
- Some symptoms include lack of coordination, excessive salivation, abnormal behavior and chronic weight loss.



Since 2002, more than 5,000 deer and 100 hunter-harvested elk have tested negative for CWD.

Game and Fish has a CWD plan that identifies means to prevent a disease outbreak, or to eliminate or contain CWD if it is detected in the state. A significant part of the plan calls for reducing the overall state deer population to management goals. All things being equal, Kreil said, the smaller the population, the less likelihood the disease will spread.

The Department has been aggressive in trying to reduce the deer population. Game and Fish has allocated 143,500 deer gun licenses for the 2006 season, making it the fifth year in a row of more than 100,000 licenses. "Managing deer and elk through regulated public hunting helps minimize the potential for overabundance and disease outbreaks," Kreil said.

The management plan also involves regulating – through governor's proclamation – carcass importation of hunter-harvested cervids from areas within states or provinces that have diagnosed CWD cases. Hunters are not allowed to transport into North Dakota the whole carcass, or certain carcass parts, of deer or elk from areas within states or provinces with documented occurrences of CWD in wild populations and private game farms.

Hunters taking white-tailed deer, mule deer or elk from areas documented with CWD are allowed to transport the following portions of the carcass: meat that is cut and wrapped either commercially or privately; quarters or other portions of meat with no part of the spinal column or head attached; meat that has been boned out; hides with no heads attached; clean (no meat or tissue attached) skull plates with antlers attached;

antlers with no meat or tissue attached; upper canine teeth, also known as buglers, whistlers or ivories; and finished taxidermy heads.

Another part of the plan tries to limit or reduce the likelihood of direct or indirect disease transmission by limiting contact between free-ranging and farmed cervids. "We conduct a risk assessment before approving free-ranging deer and elk to be translocated within the state," Kreil said, "and the North Dakota Board of Animal Health does the same for farmed cervids brought into or moved within the state. We work cooperatively with the State Board of Animal Health to address disease prevention issues and minimize the interaction between wild and farmed cervids. At times this may require removing and testing wild deer or elk that have inadvertently gained entrance to a farmed cervid facility, or similarly, farmed deer or elk that somehow escape into the wild."

An ounce of prevention is truly worth a pound of cure in the case of CWD, Kreil said.

While a lot has been done to keep North Dakota's deer and elk CWD free, much more work will continue with this important issue. "We will continue our surveillance efforts, and continue to coordinate with other agencies and organizations," Kreil said. "We also feel it is very important to keep the public, hunters, legislators and other wildlife and health agencies informed on what we are doing, and of any impending findings that occur."

Even if CWD does find its way into North Dakota, Kreil is confident the Department has learned enough from observing how other states tackle the issue. "We have followed it enough to know what works and

what doesn't," he said. "We have a plan in place depending on animal density and geographic location.

"Most importantly," Kreil added, "we have to keep the public fully informed. We believe that hunters in North Dakota know what CWD is and what it isn't. They understand it is another wildlife disease that needs monitoring and management, but also that CWD will not devastate the state's deer or elk herd. Nor do we believe that it will discourage hunters from continuing the tradition of deer hunting and the consumption of venison. Even with CWD present in Wyoming, Colorado and South Dakota, people in those states still have a strong interest in hunting."

But the best plan, Kreil said, is the one that stays in the file because CWD never finds its way into North Dakota.

GREG FREEMAN is the Game and Fish Department's news editor.

2005 CWD Results Negative

Test results for chronic wasting disease on 1,536 wild deer and 31 elk collected from North Dakota hunters during the 2005 hunting season are negative, according to Dorothy Fecske, State Game and Fish Department wildlife disease biologist.

Samples for CWD testing were sent to the Wyoming State Veterinary Lab last December, and Game and Fish officials were notified of the results in June.

"Hearing this same news every year never gets old," Fecske said, while mentioning that monitoring efforts and support for CWD research will continue in the future.

Samples in 2005 were collected from hunter-harvested deer taken in 25 deer hunting units covering southwestern North Dakota and the eastern third of the state. "As in years past, the efforts from all those involved, including hunters, meat processors, Department staff and other agencies have been tremendous," Fecske said. "All the volunteer help justifies how important this issue is to everyone."

Since 2002, more than 5,000 North Dakota deer and about 100 elk have tested negative for CWD. To date, CWD has not been diagnosed in wild or farmed deer or elk in North Dakota.

Scientists have found no evidence that CWD can be transmitted naturally from deer to humans or livestock.

